# DRAFT Data Assessment Team (DAT) Conference Call Notes 05/19/2016 at 11:00 a.m.

Participants: Jeff Stuart (NMFS), Rhiannon Mulligan and Loi Tran (DWR), Josh Gruber (USFWS), Geir Aasen (DFW)

Sacramento River Fish Monitoring update provided by Rhiannon Mulligan (DWR):

| Preliminary Rotary Screw Trap (RST) Report |   |   |                                   |                                    |  |
|--|---|---|-----------------------------------|------------------------------------|--|
| Species*                                   | FWS Red Bluff Diversion Dam RST (Estimated Passage) | Glenn-Colusa<br>Irrigation District<br>(GCID) RST (Catch) | DFW Tisdale Weir<br>RST (Catch)** | DFW Knights Landing<br>RST (Catch) |  |
| Date                                       | 05/06/2016-<br>05/19/2016                           | 05/12/2016  |                                   | 05/09/2016-<br>05/18/2016          |  |
| CHNF                                       | 177,521   | 229   |                                   | 26                                 |  |
| CHNLF                                      | 159   |   |                                   |                                    |  |
| CHNW                                       | 0   |   |                                   |                                    |  |
| CHNS                                       | 4,527   |   |                                   | 1                                  |  |
| Ad-Clipped<br>CHN                          | Not Reported  | 75 (fall run)   |                                   | 10                                 |  |
| SH   | 733   |   |                                   |                                    |  |
| Ad-Clipped SH                              | Not reported  |   |                                   |                                    |  |
| GST  | Not reported  |   | Not Reported                      | Not Reported                       |  |

<sup>\*</sup>Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, GST= Green Sturgeon. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.

RBDD- The RBDD report for 5/6-5/20 was added to the DAT notes after the meeting. Note on sturgeon: About 2,000 sturgeon have been caught in the screw traps this is the second highest amount of any year in sampling history. RBDD is getting close to the take limit of 3,000, so sampling efforts have been reduced. All traps 3 of 4 traps are at 50% and sampling is reduced to 4 or 5 days a week. The increase in sturgeon could be due to the removal of diversion dam so fish have more access upstream.

GCID- cone was raised 5/12 due to high volume of debris.

Graphical summaries of the monitoring data collected at the Sacramento River and at other locations can be found at <a href="http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm">http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm</a>. In addition, the biweekly passage reports of juvenile salmonids sampled at the Red Bluff Diversion Dam are available at <a href="http://www.fws.gov/redbluff/rbdd\_biweekly.aspx">http://www.fws.gov/redbluff/rbdd\_biweekly.aspx</a>.

<sup>\*\*</sup>Tisdale- traps pulled 5/2 and have not been resumed.

### Hatchery update: Provided by Rhiannon Mulligan (DWR)

May 15<sup>th</sup>-17,2016 the Department of Fish and Wildlife will release approximately 1,630,982 brood year 2015 fall run Chinook salmon from Feather River hatchery into San Pablo Bay net pens near Mare Island. This release will include 25% marked (adipose fin clip and CWT tagged) fish.

#### <u>Delta Fish Monitoring</u> update provided by Jon Speegle via the DAT reflector (FWS):

| Preliminary FWS Trawl and Seine Catch Report from 05/08/16 to 05/14/16 |                 |                    |                     |                        |  |  |
|--|-----------------|--------------------|---------------------|------------------------|--|--|
| Species*   | Beach<br>Seines | Mossdale<br>Trawl* | Sacramento<br>Trawl | Chipps Island<br>Trawl |  |  |
| CHNF   | 10              |                    | 14                  | 100                    |  |  |
| CHNLF  |                 |                    |                     |                        |  |  |
| CHNW   |                 |                    |                     |                        |  |  |
| CHNS   |                 |                    |                     | 6                      |  |  |
| Ad-Clipped CHN   | 3               |                    | 2                   | 32                     |  |  |
| SH   |                 |                    |                     |                        |  |  |
| Ad-Clipped SH  |                 |                    |                     |                        |  |  |
| DSM  |                 |                    |                     |                        |  |  |
| LFS  |                 |                    |                     | 2                      |  |  |
| SPLT   | 2045            |                    |                     | 2                      |  |  |

<sup>\*</sup>Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, DSM=Delta Smelt, LFS=Longfin Smelt, SPLT = Splittail. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.

Information about the Delta fish monitoring data from FWS can be found at <a href="http://www.fws.gov/stockton/jfmp/">http://www.fws.gov/stockton/jfmp/</a>.

<sup>\*</sup>CDFW update (5/9-5/15)- 13 non-adclipped Chinook in the Fall and Spring run Chinook size classes.

#### Salvage Monitoring update provided by Geir Aasen (DFW):

| Preliminary DFW Salvage Report for Salmonids from 05/09/16 to 05/15/16 |                              |      |         |  |         |   |         |  |  |
|--|------------------------------|------|---------|--|---------|---|---------|--|--|
|  | Central Valley Project (CVP) |      |         | State Water Project (SWP)                    |         |   |         |  |  |
| Species  |                              |      | Clipped | Non-Adipose Fin<br>Clipped (Non-<br>Clipped) |         | Adipose-Fin<br>Clipped (Ad-<br>Clipped) |         | Non-Adipose Fin<br>Clipped (Non-<br>Clipped) |  |
|  | Salvage                      | Loss | Salvage | Loss   | Salvage | Loss                                    | Salvage | Loss   |  |
| CHNF   | 80                           | 56   |         |  |         |   | 8       | 34   |  |
| Total to Date  | 8                            | 7    | 72      | 50   | 1       | 4                                       | 35      | 150  |  |
| CHNLF  |                              |      |         |  |         |   |         |  |  |
| Total to Date  | 32                           | 26   | 8       | 7  | 61      | 272                                     | 36      | 159  |  |
| CHNW   |                              |      |         |  |         |   |         |  |  |
| Total to Date  | 90                           | 70   | 28      | 21   | 123     | 558                                     | 8       | 35   |  |
| CHNS   |                              |      | 24      | 22   |         |   | 8       | 33   |  |
| Total to Date  | 616                          | 413  | 104     | 79   | 34      | 147                                     | 50      | 215  |  |
| CHNU   |                              |      |         |  |         |   |         |  |  |
| Total to Date  |                              |      |         |  |         |   |         |  |  |
| SH   |                              |      |         |  | 4       |   |         |  |  |
| Total to Date  | 585.7                        |      | 61      |  | 731     |   | 57      |  |  |

- -Chinook race based on length (Delta model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS=Spring run, CHNU= Unknown race (Chinook greater than the length-at-date criteria or fork length not measured), SH =Steelhead.
- -Salvage and loss estimates are rounded to the nearest whole fish.
- -Documentation on how to calculate salvage and Chinook loss can be found at <a href="mailto:ftp://ftp.delta.dfg.ca.gov/salvage/Salmon%20Loss%20Estimation/">ftp://ftp.delta.dfg.ca.gov/salvage/Salmon%20Loss%20Estimation/</a>.
- -Steelhead loss: SWP steelhead loss = salvage × 4.33 and CVP steelhead loss = salvage × 0.68.
- -Total to date is the total since 10/1/15 (the start of water year 2015).
- -Data subject to revision.

Notes:

| Preliminary DFW Salvage Report for Smelt and Other Species from 05/09/16 to 05/15/16 |         |               |         |               |  |
|--|---------|---------------|---------|---------------|--|
|  | CVP     |               | SWP     |               |  |
| Species  | Salvage | Total to Date | Salvage | Total to Date |  |
| DSM  |         | 12            |         | 8             |  |
| LFS  |         | 8             |         | 2             |  |
| SPLT   |         | 97            | 20      | 294           |  |
| GST  |         |               |         | 4             |  |
| WST  |         |               |         |               |  |

- -DSM=Delta Smelt, LFS=Longfin Smelt, SPLT=Splittail, GST=Green Sturgeon, WST=White Sturgeon.
- -Salvage estimates are rounded to the nearest whole fish.
- -Total to date is the total since 10/1/15 (the start of water year 2015).
- -Data subject to revision.

#### Smelt Monitoring Update provided by Trishelle Morris via the DAT reflector (DFW):

20-mm Survey 5 is in the field this week, 5/10/2016 – 5/13/2016. We expect to complete a full survey (47 stations, 3 tows per station), crews are sampling the final stations today. We encountered high volumes of filamentous algae in the San Joaquin and Sacramento River systems, which is affecting the processing time of some samples. Processing is about 9% complete, thus far no Delta Smelt or Longfin Smelt have been collected.

20-mm Survey 4 was conducted 4/25/2016 – 4/28/2016. Processing is 99% complete. Thus far in Survey 4 we have collected 15 Delta Smelt ranging in size from 16-32 mm, and 425 Longfin Smelt ranging in size from 12-33 mm.

Lab staff confirmed collection of juvenile Delta Smelt from Spring Kodiak Trawl Survey 5, which was in the field 5/2/2016 – 5/5/2016. Juvenile Delta Smelt were collected in Montezuma Slough (stations 606 and 609, n=3) and in the Sacramento Deep Water Shipping Channel (station 719, n=23). These fish ranged in size from 22-42 mm.

Processing is ongoing and data is preliminary and subject to change. Data will be available on our 20-mm and SKT webpages shortly.

https://www.wildlife.ca.gov/Conservation/Delta/20mm-Survey

https://www.wildlife.ca.gov/Conservation/Delta/Spring-Kodiak-Trawl

#### **Smelt Working Group** update provided by Leigh Bartoo via the DAT reflector (FWS):

#### **Meeting Summary**

The Working Group agreed that given present distribution, current salvage, and Delta conditions, there was no indication that the projected combined exports of approximately 1600 cfs for the week (potentially resulting in daily average OMR flows of approximately -2000 cfs) need to be modified for the protection of Delta Smelt adults and larvae.

The Working Group is following guidance for entrainment protections from Action 3 (juvenile Delta Smelt). The Working Group will continue to monitor Delta Smelt survey and salvage data and Delta conditions, and will meet again on Monday, May 23, 2016 at 10 am.

http://www.fws.gov/sfbaydelta/cvp-swp/smelt\_working\_group.cfm.

<u>Delta Operations for Salmonids and Sturgeon (DOSS) Working Group</u> Update provided by Jeff Stuart via the DAT reflector (NMFS)

- DOSS met Tuesday morning (5/17/16), and provided no advice.
- RPA Implementation
  - o IV.1.2 (DCC ops): DCC gates have been closed since 12/15/15. This week Reclamation will internally discuss the DCC operations schedule over the next month. Gates may be operated as early as May 21, with gates closed for up to 14 days through June 15.
  - o IV.2.3 (OMR management):
    - No triggers exceeded over past week
    - OMR limit of -5,000 cfs is in effect for NMFS' species
  - o IV.2.1 San Joaquin River I:E ratio:
    - Started 4/1/16. Currently 2:1 ratio Vernalis flows to exports with a minimum of 1,500 cfs exports for human health and safety (Dry year classification as of April WY update).
    - NMFS concurred with Reclamation's request for flexibility in the I:E ratio on 4/14/16 allows picking up "augmented water" from Oakdale Irrigation District and South San Joaquin Irrigation District releases of up to 75 thousand acre feet (TAF) from New Melones at a 1:1 ratio by the Projects and moving the water south of Delta. Remaining "unaugmented water" will be picked up at the 2:1 ratio with a minimum export rate of 1,500 cfs for human health and safety.
- Fish Distribution Estimates (all distributions updated since last week)
  - $\circ$  Estimate of young-of-year **winter-run Chinook** distribution: <1% upstream,  $\leq$  5% in the Delta,  $\geq$  95% exited the Delta (same as last week)
  - $\circ$  Estimate of young-of-year **spring-run Chinook** distribution: <1% upstream,  $\leq$  5% in the Delta,  $\geq$  95 % exited the Delta
  - Estimate of young-of-year hatchery winter-run Chinook distribution: <1% upstream, <5% in the Delta, >95% exited the Delta (same as last week)
- Entrainment risks (primarily to Winter-run and Spring-run Chinook)
  - Overall Entrainment into **Interior Delta**:
    - LOW for Sacramento Basin fish (same as last week)
    - Low for San Joaquin Basin fish (Pulse flows on the Stanislaus are ending, SJR flows decreasing and water temperatures are expected to increase as flows decline).
  - o Overall Entrainment into CVP/SWP Export Facilities:
    - OMR -2,500 cfs to -3,500 cfs:
      - ➤ **LOW** for Sacramento Basin fish (same as last week)
      - **LOW** for San Joaquin River fish (same as last week)
    - OMR -3,500 cfs to -5,000 cfs:
      - **LOW** for Sacramento River basin fish (same as last week)
      - Low for San Joaquin River basin steelhead (same as last week)

## Full DOSS notes posted at:

http://www.westcoast.fisheries.noaa.gov/central\_valley/water\_operations/ocapwy2016.html

# **Operations** update provided by Loi Tran (DWR)

| Preliminary Summary for 05/19/2016                |                    |   |        |  |  |  |  |
|---|--------------------|---|--------|--|--|--|--|
| SWP   |                    | CVP   |        |  |  |  |  |
| Clifton Court Inflow (cfs)                        | 400                | Jones Pumping Plant (cfs)                         | 400    |  |  |  |  |
| SWP San Luis Reservoir Share (TAF) as of Midnight | 453                | CVP San Luis Reservoir Share (TAF) as of Midnight | 389    |  |  |  |  |
| San Luis Reservoir Total (TAF) as of Midnight     | 842                | American – Nimbus Reservoir Releases (cfs)        | 5,000  |  |  |  |  |
| Feather – Oroville Reservoir Releases (cfs)       | 4,500              | Sacramento – Keswick<br>Reservoir Releases (cfs)  | 6,500  |  |  |  |  |
|   |                    | Stanislaus-Goodwin Reservoir Releases (cfs)       | 1,000* |  |  |  |  |
| DELTA OPERATIONS                                  |                    |   |        |  |  |  |  |
| Outflow (cfs)                                     | ~11,400            | Delta Cross Channel (DCC) Gates                   | closed |  |  |  |  |
| Total Delta Inflow (cfs)                          | ~14,976            | 1 day OMR average (cfs)                           | -1360  |  |  |  |  |
| X2 (km)   | =73                | 5 day OMR average (cfs)                           | -2412  |  |  |  |  |
| Export/Inflow (%)                                 | % (14-day average) | 14 day OMR average (cfs)                          | -2663  |  |  |  |  |

<sup>\*1,000</sup> to 950cfs today and by June 6<sup>th</sup> around 500 cfs.

Delta conditions: balanced

Controlling factors: Delta outflow X2

http://www.water.ca.gov/swp/operationscontrol/docs/delta/deltaops.pdf.

#### **Next Conference Call:**

Cal fed ops scheduled for May 25<sup>th</sup>.

DAT call will continue to June 2<sup>nd</sup> and after we may discontinue meeting and provide updates via the DAT reflector.

Final DAT notes can be viewed at

http://www.water.ca.gov/swp/operationscontrol/calfed/calfeddat.cfm